

**REMARKS**

Claims 47-94 stand presently rejected as of the Final Office Action dated May 11, 2010. Claims 47, 49, 52, 56, 58, 61, 66, 69, 72, 76, 78, 81, 86, 88, 89, 91, 92 and 94 have been amended. Claims 47, 56, 66, 76, 86, 89 and 92 are independent claims, and have been amended in accordance with prior discussion. Claims 49, 52, 58, 61, 69, 72, 78, 81, 88, 91 and 94 have been amended to correct minor typographical issues. Moreover, claims 47-94 are currently pending in the application.

No new matter has been added. It is believed that the remarks presented herein below address the Examiner's rejections and objections of the claims. Examiner Dang and his supervisor Thai Tran are thanked for their time and assistance in the telephone conference of September 15, 2010. In the context of that conference it was confirmed that the proposed Declaration Under §1.132 was acceptable. It was also agreed upon that the Collar reference (US Patent Application 2005/0008348) remains the closest reference. Distinctions as between navigation data and presentation data, and specifically PGC and GOP element were discussed as well as the plain meaning of "initiation" and "interruption."

Claim amendments were also discussed and agreed upon as sufficient to overcome the current basis for rejection. A proposed set of claim amendments for each independent claim was discussed and the Examiner and Supervisor agreed to review this proposal to insure conformity with expectation so as to expedite this Request for Continued Examination and the according examination.

More specifically, it is believed that the telephone interview of September 15, 2010 provided an opportunity for active discussion regarding the present invention and the Examiner's basis for rejection – and more importantly permitted discussion and agreement to be formed regarding a set of claim amendments sufficient to resolve the basis for rejection. Those claim amendments are presented herein, and for the sake of providing a complete response as requested, fully supported in the response below. If upon review of the following material additional conversation would be helpful, the Examiner is encourage to contact the undersigned attorney.

**Claim Rejection – 35 U.S.C. § 112**

Claims 47-85 were rejected under 35 U.S.C. §112, first paragraph, on the basis of reciting "GOP Structure of an MPEG standard," perceived by Examiner to be subject matter not described in the specification.

In response to discussions with Examiner Dang and Supervisor Tran, a Declaration Under §1.132 was prepared noting in the context of this art, whether explicitly stated with respect to an MPEG standard, or implicitly understood as such, those skilled in the art can, do and will appreciate the plain meaning of the "group-of-picture ("GOP") structures."

This proposed declaration was shared with Examiner Dang and Supervisor Tran and approved, and is accordingly submitted herewith. As such, it is understood that the issue of the rejection under 35 U.S.C. §112, first paragraph, is moot and withdrawn.

### **Claim Rejection – 35 U.S.C. §103**

Claims 47-95 stand rejected under 35 U.S.C. §103(a), as being unpatentable over US Patent Application 2005/0008348 to Collar et al., herein after "Collar" in view of US Patent 5,970, 658 to Murase et al., herein after "Murase." Applicant respectfully disagrees with and traverses these rejections.

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007):

"Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP §2143.03, to ascertain the differences between the prior art and the claims at issue, "[a]ll claim limitations must be considered" because "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385. According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the aforementioned *Graham* factual inquiries are resolved, there must be a determination of whether the claimed invention would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;

- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) "Obvious to try"—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007).

As has been discussed, the DVD format was established with the anticipation that some titles might require playback in some random way. As such, the RND function is provided to generate "random" numbers as necessary. These random values can be used to select alternative navigation paths that result in different video playback. In actual real world practice however there are issues with the RND function, such as the RND Function always returning the same value such that there is no randomness, the RND generating values in a range of 0 – (N-1) on some players and 1 - N on others which results in inconsistencies and potential errors, and the RND function always generates the same sequence each time the audiovisual product is inserted. For game play these issues are not insignificant. Without randomness the game is likely unplayable. With a faulty range, some aspects of the game may never occur, and with the same sequence of values the game will never vary from one instance of play to the next.

The present invention overcomes all of these issues. Collar addresses only the range issue and Murase addresses none. As has been discussed, digital audiovisual products such as a DVD consist of Navigation Data and Presentation Data. The Navigation Data are the logical instructions for how the presentation should occur, and the Presentation Data are the actual or physical elements of data representing audio, video or other presentation material. The fact that both Presentation Data and Navigation Data are encoded upon the recording media does not alter the fact that they are distinct and different much as written sheet of instructions on how to navigate to an address and a physical building at that address different even though the sheet of instructions and the building are both tangible physical things.

GOPs are the physical structures providing the audiovisual data whereas PGCs are the logical structures referring to one or more GOPs. In other words GOPs are the Presentation Data whereas PGCs are the Navigation Data. Although related they are distinct and different.

Collar clearly teaches the random value generation as an event tied to the Navigation Data, specifically the PGC. RND element is engaged as part of the PRE COMMAND of an initiated Program Chain, a "PGC" – see for example Collar FIGs. 6 and 9.

Collar specifically teaches the *initiation* of the PGC to generate a random number – not interruption of the video sequence, and a method for correcting the range of the random number.

"During the course of normal playback of a multimedia presentation or game, the user may select a button, or start image, that triggers or initiates, the random selection. ... **The first module or first subroutine, in the random selection program is the random selection module 12, which triggers or initiates the generation of a random integer number between the number 1 and the number S+1, where S is a finite integer number denoting the total number of possible selections.** Examples of the code used for this module are listed in Cmd.1 14 of FIG. 6 and Cmd.4 16 of FIG. 9a...The next step is for a comparison module 20 to compare the random number stored in the general parameter register 18, GPRM(x), with a predetermined integer N, which has an initial value N<sub>i</sub>, equal to the value S." ¶¶ 43-48, emphasis added.

"**Initiation**" as in to "**initiate**" is defined as, "1. To begin, set going, or originate..." (Random House Webster's Unabridged Dictionary 2<sup>nd</sup> Edition, 2001). "**Interruption**" as in to "interrupt" is defined as, "1. To cause or make a break in the continuity or uniformity of (a course, process, condition, etc.). 2. To brake off or cause to cease, as in the middle of something: he interrupted his work to answer the bell... 4. To cause a break or discontinuance..." (Random House Webster's Unabridged Dictionary 2<sup>nd</sup> Edition, 2001). There can and should be little doubt as to the plain meaning of each term and more importantly the distinctions there between. It is one thing to *initiate* heart surgery, and quite another to *interrupt* heart surgery.

As Collar clearly and unambiguously teaches the *initiation* of a PGC with a PRE COMMAND to generate the random value, though an interruption of some prior thing may have occurred, whatever was interrupted is not in any way tied to the generation of the random value. Specifically, in Collar the seed and navigation component are not received from any interrupted video sequence – if one even exists, and certainly not from the GOP structures of any interrupted video sequence – if one even exists. The PRE COMMAND of an *initiated* PGC is the source in Collar for the random value.

Indeed, even the sequence of presentation data specified by the PGC is not a direct factor in the generation of the random value. The random value occurs in the PRE COMMAND so that a selection of video sequence can occur – but any subsequent interruption of that selected sequence has no bearing on the random value that has already been determined in the PRE COMMAND. If Examiner persists in the view that Collar teaches interruption of a video sequence resulting in a seed and navigation component being received from the interrupted sequence, the Examiner is

requested to demonstrate specifically where and how this is so given the clear teaching to initiate an PGC, and the random value occurring in that initiated PGCs PRE COMMAND.

In contrast, the present application teaches that the random value is an event tied to the **Presentation Data**. When and where the point of interruption occurs does indeed directly influence the determination of the random value, as the seed value associated with the interrupted GOP structure is an inherent element of the random value. Even if the RND function and/or the Registers are broken or otherwise faulty, the present invention still provides a random value as for a given video sequence the seed associated with an exemplary GOP #1 is different from the seed associated with an exemplary GOP #2.

The new reference of Murase appears to be provided so as to demonstrate that a PGC can have a single GOP. Even if a PGC in Collar were tied to a single GOP, Collar still unquestionably teaches that the random value generation is an event occurring when initiating the PRE COMMAND of the PGC, thus occurring **before** the potentially single GOP is displayed.

With respect to the example code for the Pre Command shown in FIGs. 6 and 9a, it is specifically noted that Collar is **NOT teaching a seed value** for the RND function, but **only the setting of the Upper Bound** for possible selections of the Random Value. Collar is aware that in certain instances DVD players do not interpret the random function property.

**"These incompatible DVD players instantiate the random function to generate a random value between 0 and R-1, instead of the intended range of 1 to R. For example, if the programming code specifies RND GPRM(x) 6, the incompatible DVD player will generate a random value between 0 and 5, instead of the intended range of 1 to 6. In the context of using such a function to generate the value of a roll of a die (not shown), the die side corresponding to the value 6 would never be selected on the incompatible DVD player, thus seriously impacting the user's experience. Therefore, a work around for this known fault is to set the upper bound to a value of R+1 and then declare the values from 1 to R to be the only valid values."**  
¶148, emphasis added.

Moreover, Collar is providing only a value for the upper bound of a Range for selection of the random value and a possible way to resolve inconsistencies in the range as between different playback devices. Murase, teaching nothing with respect to any correction of issues regarding random number generation adds nothing further.

As was discussed with Examiner Dang before the conference call of September 15, 2010 and then in detail during the call of September 15, 2010, the present invention not only distinguishes over Collar by teaching random number generation as an event tied to the Presentation Data as opposed to the Navigation Data, the present application also teaches that the

random value is derived from the sum of a predetermined value and the seed value associated with the interrupted GOP structure.

A proposed amendment regarding this point was discussed and refined in the course of the September 15, 2010 conference with Examiner and Supervisor Tran. Claim 47 was selected as the model for discussion and the development of the amendment and was accordingly agreed to read as follows:

47. A method of generating a random number associated with a user initiated interruption of a video sequence, comprising:  
sequentially presenting to a user a plurality of group-of-picture ("GOP") structures of an MPEG standard collectively providing a first video sequence, each group-of-picture structure having a predetermined seed component and a navigation component, **the seed component having a seed value;**  
in response to a user initiated interruption during the presentation of a GOP structure, receiving the seed component and the navigation component from the interrupted GOP structure;  
providing a random number based at least in part on the seed component **wherein as a user initiated point of interruption will vary from one sequence presentation to another, the varying point of interruption to receive the seed component insures a random number as the random number is derived from the sum of a predetermined value and the seed value;** and  
linking or jumping to a second video sequence identified by the navigational component.

As was discussed and agreed with Examiner Dang and Supervisor Tran, this amendment resolved the Examiner's concerns and distinguished claim 47 over Collar and Murase. Further it was discussed and agreed that similar amendments to the other independent claims would likewise also resolve the Examiner's concerns. A draft set of the amended independent claims was prepared and submitted for review and approval by both the Examiner and Supervisor Tran. As such review and approval was confirmed those amendments are now formally presented herewith.

In light of the above points and elements of discussion with Examiner Dang and Supervisor Tran, it is respectfully submitted that Collar and Murase fail to properly combine so as to provide applicant's claimed invention with or without the additional claim limitation as added by the various dependent claims. Indeed as the *Graham* factual inquiry can not be properly resolved, application of any of the rationales (A)-(G) as set forth in the guidelines is futile for Collar and Murase simply fail to provide all of the claimed elements set forth in the claims as presently amended.

Withdrawal of the Collar and Murase references and allowance of claims 47-94 is therefore respectfully requested.

CONCLUSION

For the reasons given above, and after careful review of all the cited reference, Applicant respectfully submits that the cited reference can in no way be taken to result in, teach or suggest Applicant's claimed invention. Applicant believes that the present invention is in a condition for allowance. Favorable reconsideration and a Notice of Allowance for claims 47-94 is most respectfully requested. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

It is believed that all of the pending claims have been addressed, and all issues raised in the Final Office Action of May 11, 2010 addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant believes that no fees are due beyond the additional two (2) month extension of time fee (Small Entity - \$245.00), and RCE filing fee (Small Entity - \$405.00), totaling \$650.00.

Respectfully submitted,

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